EQUINOX

SuperSerial Megaport
SSM-8I Multiport Board
Hardware Reference Guide

SuperSerial™ Technology

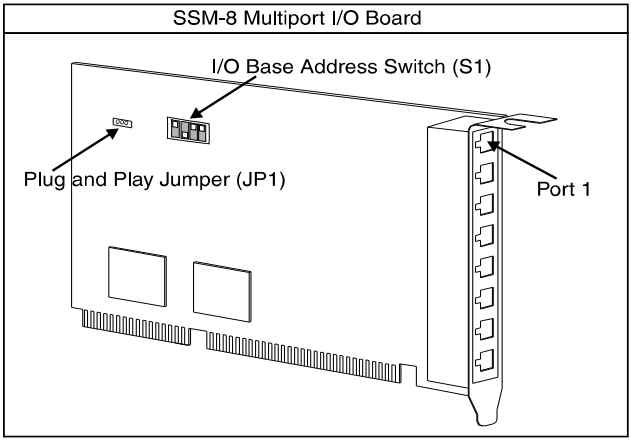
PN 560108/B
April 1996

Overview

Equinox SuperSerial Megaport Boards are intelligent, high-speed (up to 115K bps) *multiport boards* providing high performance serial I/O solutions for ISA, EISA and Micro Channel bus systems. All port interfaces are standard RS-232 with partial modem control and voltage surge protection. (If your application requires full modem control contact your Equinox reseller for information on SuperSerial Technology (SST) products.)

SuperSerial Megaport Boards appear to the system host processor as memory. That is, they are memory mapped devices. Each board is automatically mapped into system memory at the time of device driver installation. The device driver soft-configures all boards each time the system is initialized (booted). See PN 560084 (UNIX SVR3.2, SCO, and XENIX) or PN 560085 (UNIX SVR4 STREAMS) for detailed device driver infomation.

The SuperSerial Megaport Board (shown below) occupies a slot in the host computer and provides the intelligent functions to "off-load" the CPU serial communications processing tasks. Boards are available for ISA, EISA and Micro Channel bus systems and are compatible with UNIX operating systems.



Use the following procedure to install your SuperSerial Megaport Board. Alternatively, you may follow the installation instructions presented in your host system documentation.

1. Set the host computer system power switch to OFF and disconnect the power cord.
2. Locate a free expansion slot.
3. Insert and secure the board firmly into the expansion slot.
4. Replace the power cord and turn the host computer system ON.

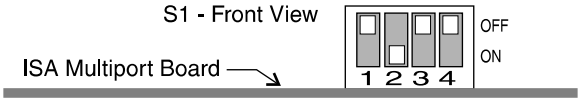
Plug and Play

ISA SuperSerial Megaport Boards must be assigned a unique I/O base address. This can be accomplished by the use of ISA Plug and Play (PnP) or the I/O Base Address Switch S1.

PnP for ISA boards is not currently supported by all Operating Systems (OS). (At the time of this printing, Windows 95 is the only OS supporting PnP.) Consult your OS documentation to determine if it supports PnP.

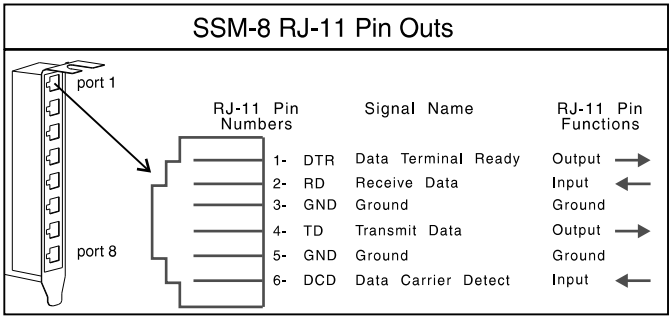
If PnP is not supported by your OS, or if you are unsure, place the PnP jumper (JP1) in the position closest to switch S1. This will disable PnP and enable the 4-position I/O Base Address switch as shown below.

If multiple ISA boards are installed in the same system, a different address must be assigned to each board. (This is automatically accomplished if PnP is utilized.) This procedure should be performed before the board is physically installed.



1	2	3	4	Base Address
OFF	OFF	OFF	OFF	200
ON	OFF	OFF	OFF	220
OFF	ON	OFF	OFF	240
ON	ON	OFF	OFF	260
OFF	OFF	ON	OFF	280
ON	OFF	ON	OFF	2A0
OFF	ON	ON	OFF	2C0
ON	ON	ON	OFF	2E0
OFF	OFF	OFF	ON	300
ON	OFF	OFF	ON	320
OFF	ON	OFF	ON	340
ON	ON	OFF	ON	360
OFF	OFF	ON	ON	380
ON	OFF	ON	ON	3A0
OFF	ON	ON	ON	3C0
ON	ON	ON	ON	3E0

Device Cabling



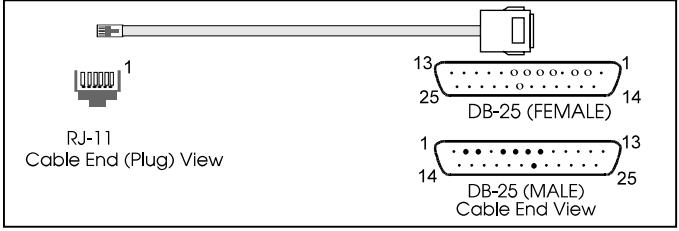
Following are cable diagrams detailing how to build your own cables to go between a SSM-8 and your terminals, printers, PCs, modems, etc.

NOTE: If modems are used they must be set to utilize *software (Xon/Xoff) flow control*. Because the SSM-8 has partial modem control, hardware flow control (RTS/CTS) and modem control (DTR/CD) cannot be used together.

If your application requires full modem control contact your Equinox reseller for information on SuperSerial Technology (SST) products.

Cable pin outs for RJ-11 to terminal/printer DB-25

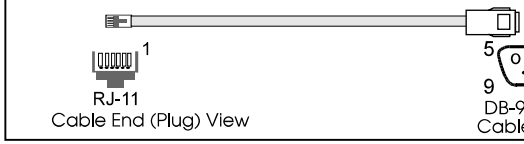
Signal	Pin #		Pin #	Signal
			8	Carrier Detect
Carrier Detect	6		20	Data Terminal Ready
Signal Ground	5		6	Data Set Ready
Transmit Data	4		3	Receive Data
Signal Ground	3		7	Signal Ground
Receive Data	2		2	Transmit Data
Data Terminal Ready	1		5	Clear to Send



Device Cabling (continued)

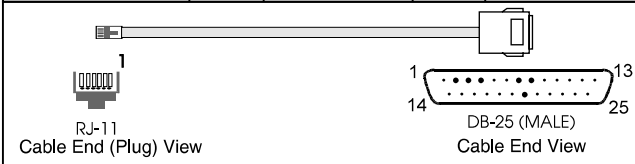
Cable pin outs for RJ-11 to PC DB-9

Signal	Pin #		Pin #	Signal
			1	Carrier Detect
Carrier Detect	6		4	Data Terminal Ready
Signal Ground	5		6	Data Set Ready
Transmit Data	4		2	Receive Data
Signal Ground	3		5	Signal Ground
Receive Data	2		3	Transmit Data
Data Terminal Ready	1		8	Clear to Send



Cable pin outs for RJ-11 to modem DB-25

Signal	Pin #		Pin #	Signal
Carrier Detect	6		8	Carrier Detect
Signal Ground	5		4	Request to Send
Transmit Data	4		2	Transmit Data
Signal Ground	3		7	Signal Ground
Receive Data	2		3	Receive Data
Data Terminal Ready	1		20	Data Terminal Ready



Note: Modem must be set for Xon/Xoff flow control

Diagnostics

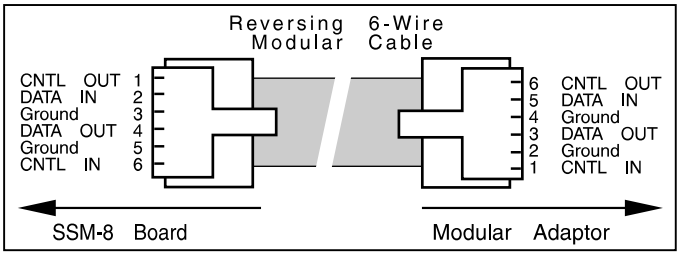
Use Equinox RJ Loopback connector 750073 with the ssdiag diagnostic utility (see software manuel 560084 or 560085) and set parameters to external loopback.

Modular Adaptors

Modular adaptors are available to convert modular jacks to DB-25 or DB-9 connectors. The following list describes the modular adaptors available from Equinox. Use a standard reversing 4-wire (data only) or 6-wire (DTR/CD modem control) RJ-11 modular cable with these adaptors.

P/N	Connector	Connects To
210036	DB-25 DCE male	terminal or printer (female)
210037	DB-25 DCE female	terminal or printer (male)
210026	DB-25 DTE male	modem or multiplexer (female)
210027	DB-25 DTE female	DCE devices (male)
210038	DB-9 female	DB-9 PC (male)

The adapters listed above (with modular cables as shown below) may be used to attach devices to the SSM-8. The outer two wires which support control signals are omitted when using 4-wire cables. Standard modular cables used for telephones are always reversing (e.g., pin 1 is connected to pin 4, etc.) and are typically 4-wire. If a user supplied modular cable is used, *make sure the cable is reversing* (see figure below).



The following modular cables are available from Equinox (use with modular adaptors from table above):

P/N	Description
690168	10' 6-wire reversing modular cable
690204	25' 6-wire reversing modular cable
690205	75' 6-wire reversing modular cable

DECLARATION OF CONFORMITY

according to ISO/IEC Guide 22 and EN 45014

Manufacturer's Name: Equinox Systems Inc.
Manufacturer's Address: One Equinox Way
Sunrise, Florida 33351-6709
USA

declares, that the products

Product Names: SuperSerial Technology (SST)
serial I/O products
Megaplex serial I/O products
ELS Ethernet terminal servers

Model Numbers: SST-2, SST-4, SST-8, SST-64,
SST-128, PM-8, PM-16, MIM-1,
CMX-16, SSM-8, SSM-12, SSM-24
Megaplex, Megaplex CMX

ELS-8, ELS-16

Product Options: All

conform to the following Product Specifications:

Safety: EN 60950:1992, CSA C22.2 No:950, UL 1950
EMC: EN 55022 (CISPR22 A): 1987E,
FCC Part 15 Class A
EN 50082-1: 1992 - Generic Immunity
IEC 801-2: 1984, 8kV CD, 8kV AD
IEC 801-3: 1984, 3V/m, 27-500MHz
IEC 801-4: 1988, 1kV Power &
0.5kV I/O Lines

Supplementary Information:

The products herewith comply with the requirements of the Low Voltage Directive, 73/23/EEC and the EMC Directive 89/336/EEC, including amendments by the CE-marking Directive 93/68/EEC.

April 5, 1996 Stanley A. Vogt - Director, Manufacturing

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The equipment has been tested and found to comply with the limits for Class A digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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